

**FY 2018 PRESS CONFERENCE & HEARINGS**  
**EPA OFFICE OF RESEARCH AND DEVELOPMENT SUPPORT FOR TSCA**

**ISSUE/TOPIC:** What role does EPA research play implementing the revised TSCA?

**BACKGROUND:**

- Key provisions of the Frank R. Lautenberg Chemical Safety for the 21<sup>st</sup> Century Act include:
  - For Existing Chemicals: EPA must evaluate the safety of existing chemicals using a three-stage process that includes prioritization, risk evaluation, and risk management.
  - Alternative to Vertebrate Testing Strategy: EPA must develop a strategic plan to promote the development and implementation of alternative test methods and strategies to reduce, refine or replace vertebrate animal testing.

**ORD SUPPORT:**

- **Evaluating the Safety of Existing Chemicals:** ORD is providing OPPT with the data, information, and tools needed to prioritize chemicals and to conduct risk evaluations, including:
  - *Prioritization:*
    - Computational modeling of chemical use and human exposure for thousands of chemicals, including exposure to susceptible subpopulations.
    - A desktop tool that integrates available experimental and computational data on chemical properties, environmental fate and behavior, toxicology, human exposure, and consumer use.
    - A proposed approach for using high throughput screening data to make decisions about which chemicals should undergo risk evaluation.
  - *Risk Evaluation:*
    - Database access for managing large volumes of relevant literature with public transparency.
    - Technical support for the development of chemical risk evaluations, including targeted support on ecotoxicity data and technical expertise for asbestos and hexabromocyclododecane (HBCD).
    - Strategies and processes for conducting transparent, systematic reviews of existing chemical information.
- **Alternative to Vertebrate Testing Strategy:** ORD is working closely with OPPT to develop the strategic plan required by TSCA. In addition, ORD has chemical assessment approaches that will help promote non-animal alternative testing methodologies, including:
  - ORD's computational toxicology research (CompTox), which uses advances in biotechnology, computer modeling, and chemistry to predict which chemicals may cause toxicity without performing expensive and time consuming traditional animal tests.
  - ORD's Toxicity Forecaster (ToxCast), which provides automated chemical screening technologies to expose living cells or proteins to thousands of chemicals to identify important biological processes that may be disrupted and lead to potential toxicity.

**TALKING POINTS:**

- EPA's research provides critical chemical data, information, tools, and approaches for implementation of the revised TSCA. For example:
  - Our innovative computational toxicology (CompTox) research program develops predictive models and testing methods to assess and prioritize potential toxicity of thousands of chemicals at a time, saving time and federal resources.
  - Our programs have significant expertise in the development of chemical toxicity

assessments with health, ecological, exposure and dose response science experts and practiced systematic review techniques.